



PATENT

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April 19, 2004 Paula M. Loud  
Date Paula M. Loud

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Clarence T. Tegreene  
Application No. : 10/814,454  
Title : MOTE NETWORKS USING DIRECTIONAL  
ANTENNA TECHNIQUES  
Filed : March 31, 2004

Examiner : To Be Assigned  
Art Unit : To Be Assigned  
Docket No. : 0104-003-007-000000  
Date : April 19, 2004

Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO-1449 (substitute form). Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. Pursuant to 37 CFR 1.98(a)(2), copies of the foreign patent documents and non-patent literature are attached.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserves the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Respectfully submitted,

Clarence T. Tegreene



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Dale R. Cook

Registration No. 42,434

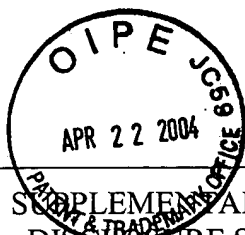
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Enclosures:

Postcard  
Form PTO-1449 (substitute)  
Copies of 38 Cited References

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Page 1 of 4	Attorney Docket Number	0104-003-007-000000

U.S. PATENT DOCUMENTS				
Examiner Initials	Cite No.	U.S. Patent Number	Name of Patentee	Date of Publication (MM-DD-YYYY)
	AA			

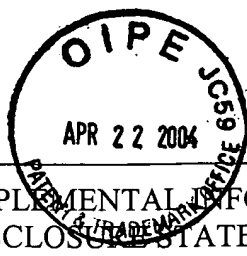
FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number	Country	Date of Publication (MM-DD-YYY)	English Translation Provided?
	AB				

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AC	BERKELY WEBS: WIRELESS EMBEDDED SYSTEMS, "Building Sensor Networks with TinyOS" May 5, 2003 Mobisys Tutorial, San Francisco Powerpoint Presentation, Culler, David; Levis, Phil; Szewczyk, Rob; Polastre, Joe; pp. 1-41 located at <a href="http://webs.cs.berkeley.edu">http://webs.cs.berkeley.edu</a> , printed on 04/15/04.
	AD	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Publications", pp. 1-3, located at <a href="http://webs.cs.berkeley.edu/publications.html">http://webs.cs.berkeley.edu/publications.html</a> , printed on 04/12/04
	AE	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Latest News", pp. 1-2 located at <a href="http://webs.cs.berkeley.edu/tos/">http://webs.cs.berkeley.edu/tos/</a> , printed on 01/27/04.
	AF	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Publications/Presentations", pp. 1-3 located at <a href="http://www.tinyos.net/media.html">http://www.tinyos.net/media.html</a> , printed on 04/13/04.
	AG	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS a component-based OS for the networked sensor regime", "Related UC Berkeley Work", pp. 1-9 located at <a href="http://webs.cs.berkeley.edu/tos/related.html">http://webs.cs.berkeley.edu/tos/related.html</a> , printed on 01/27/04.
	AH	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS Tutorial Index", pp. 1-2 located at <a href="http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/index.html">http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/index.html</a> , printed on 04/15/04.
	AI	BERKELEY WEBS: WIRELESS EMBEDDED SYSTEMS, "Tiny OS Tutorial Lesson 8: Data Logging Application", pp. 1-4 located at <a href="http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/lesson8.html">http://webs.cs.berkeley.edu/tos/tinyos-1.x/doc/tutorial/lesson8.html</a> , printed on 04/15/04.
	AJ	CENTER FOR THE BUILT ENVIRONMENT, "XYZ On A Chip: Integrated Wireless Sensor Networks for the Control of the Indoor Environment in Buildings" pp. 1-2, located at <a href="http://www.cbe.berkeley.edu/research/briefs-wirelessxyz.htm">http://www.cbe.berkeley.edu/research/briefs-wirelessxyz.htm</a> , bearing a date of 2002, printed on 01/27/04.

Examiner Signature		Date Considered	
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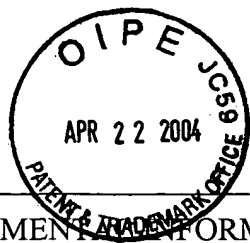
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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
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	AK	CITRIS, “Brainy Buildings Conserve Energy” p. 1-3 located at <a href="http://www.citris.berkeley.edu/applications/energy/smartbuildings.html">http://www.citris.berkeley.edu/applications/energy/smartbuildings.html</a> , printed on 01/27/04.
	AL	CITRIS, “The Real World as One Giant Database” pp. 1-3 located at <a href="http://www.citris.berkeley.edu/newsletter/2003_Newsletters/december_2003/feature.htm">http://www.citris.berkeley.edu/newsletter/2003_Newsletters/december_2003/feature.htm</a> , bearing a date of 2003, printed on 04/09/04.
	AM	“Data Repository”, University of California Berkeley, located at <a href="http://localization.millennium.berkeley.edu/data_repository.html">http://localization.millennium.berkeley.edu/data_repository.html</a> , pp. 1 of 1, bearing a date of 2001, printed on 04/07/04.
	AN	GELSINGER, PAT; Intel.com, “Expanding Moore’s Law with Convergence” pp. 1-4 located at <a href="http://www.intel.com/labs/features/em101031.htm">http://www.intel.com/labs/features/em101031.htm</a> , printed on 04/09/04.
	AO	INTEL.COM, “New Computing Frontiers-The Wireless Vineyard” pp. 1-4 located at <a href="http://www.intel.com/labs/features/rs01031.htm">http://www.intel.com/labs/features/rs01031.htm</a> , printed on 04/07/04.
	AP	ISIS NEST: Institute For Software Integrated Systems; “NEST Home: Network Embedded Systems Technology”, pp. 1-2, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/index.html">http://www.isis.vanderbilt.edu/projects.nest/index.html</a> , printed on 04/14/04.
	AQ	ISIS NEST: Institute For Software Integrated Systems; “Applications: Shooter Localizations”, pp. 1-5, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/applications.html">http://www.isis.vanderbilt.edu/projects.nest/applications.html</a> , printed on 04/14/04.
	AR	ISIS NEST: Institute For Software Integrated Systems; “Middleware: Next Middleware Services”, pp. 1 of 1, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/middleware.html">http://www.isis.vanderbilt.edu/projects.nest/middleware.html</a> , printed on 04/14/04.
	AS	ISIS NEST: Institute For Software Integrated Systems; “Tools: NEST Tools”, pp. 1 of 1, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/tools.html">http://www.isis.vanderbilt.edu/projects.nest/tools.html</a> , printed on 04/14/04.
	AT	ISIS NEST: Institute For Software Integrated Systems; “Documents: NEST Documents”, pp. 1-2, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/documents.html">http://www.isis.vanderbilt.edu/projects.nest/documents.html</a> , printed on 04/14/04.
	AU	ISIS NEST: Institute For Software Integrated Systems; “Download: NEST Download”, pp. 1-2, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/download.html">http://www.isis.vanderbilt.edu/projects.nest/download.html</a> , printed on 04/14/04.
	AV	ISIS NEST: Institute For Software Integrated Systems; “People: The NEST Group”, pp. 1 of 1, located at <a href="http://www.isis.vanderbilt.edu/projects.nest/people.html">http://www.isis.vanderbilt.edu/projects.nest/people.html</a> , printed on 04/14/04.
	AW	JOHNSON, R. COLIN, “Companies test prototype wireless-sensor nets” EE Times, pp. 1-3, printable version of article located at <a href="http://www.eet.com/article/showArticle.jhtml?articleID=9900910">http://www.eet.com/article/showArticle.jhtml?articleID=9900910</a> , bearing a date of 01/29/03, printed on 01/27/04.

Examiner Signature	Date Considered
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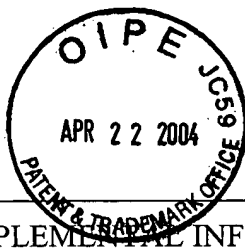
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AX	KAHN, KEVIN C.; CULLER, DAVID E.; "Ad Hoc Sensor Networks A New Frontier for Computing Applications" bearing a date of April 2002, printed on 04/09/04.
	AY	KLING, RALPH, "Intel® Research Mote" pp. 1-13, Powerpoint Presentation, located at <a href="http://webs.cs.berkeley.edu/retreat-1-03/slides/imote-nest-q103-03-dist.pdf">http://webs.cs.berkeley.edu/retreat-1-03/slides/imote-nest-q103-03-dist.pdf</a> , Intel Corporation Research, Santa Clara, CA, printed on 04/13/04.
	AZ	LEVIS, PHILIP; CULLER, DAVID; "Maté: A Tiny Virtual Machine for Sensor Networks", pp. 1-11, printed on 04/12/04
	BA	LEVIS, PHILIP; MADDEN, SAM; GAY, DAVID; POLASTRE, JOSEPH; SZEWCZYK, ROBERT; WOO, ALEC; BREWER, ERIC; CULLER, DAVID; "The Emergence of Networking Abstractions and Techniques in TinyOS" pp. 1-14, printed on 04/13/04.
	BB	LEVIS, PHILIP; PATEL, NEIL; CULLER, DAVID; SHENKER, SCOTT; "Trickle: A Self-Regulating Algorithm for Code Propagation and Maintenance in Wireless Sensor Networks", printed on 04/13/04.
	BC	LEVIS, PHILIP; PATEL, NEIL; "Maté: Building Application-Specific Sensor Network Language Runtimes", bearing a date of 11/11/03, printed on 04/12/04
	BD	"LOCALIZATION Distributed Embedded Systems" UCLA Computer Science 213: Localization Systems Powerpoint Presentation, pp. 1-61, bearing a course name of: CS 213/Estrin/Winter 2003, bearing a speaker name of: Lewis Girod, bearing a date of 02/04/03, printed on 03/15/04.
	BE	"Localization.Millennium.Berkeley.Edu", University of California Berkeley, located at <a href="http://localization.millennium.berkeley.edu/introduction.html">http://localization.millennium.berkeley.edu/introduction.html</a> , pp. 1 of 1, bearing a date of 2001, printed on 04/07/04.
	BF	"Localization Standards", University of California Berkeley, located at <a href="http://localization.millennium.berkeley.edu/localization_standards.html">http://localization.millennium.berkeley.edu/localization_standards.html</a> , pp. 1 of 1, bearing a date of 2001, printed on 04/07/04.
	BG	MARÓTI, MIKLÓS; VÖLGYESI, PÉTER; SIMON, GYULA; KARSAI, GÁBOR; LÉDECZI, AKOS; "Distributed Middleware Services Composition and Synthesis Technology"; pp. 1-8, IEEE, bearing a date of 2002, printed on 04/14/04.
	BH	PESCOVITZ, DAVID, "Robugs: Smart Dust Has Legs" pp. 1-2, located at <a href="http://www.coe.berkeley.edu/labnotes/0903/pister_print.html">http://www.coe.berkeley.edu/labnotes/0903/pister_print.html</a> , bearing a date of September 2003, printed on 04/09/04.
	BI	RAGHUNATHAN, VIJAY; SCHURGERS, CURT; PARK, SUNG; SRIVASTAVA, MANI B.; "Energy Aware Wireless Sensor Networks" pp. 1-17; Department of Electrical Engineering, University of California, Los Angeles; printed on 03/15/04.
	BJ	SAVVIDES, ANDREAS; "Hardware", pp. 1-3, located at <a href="http://nesl.ee.ucla.edu/projects/ahlos/hardware.htm">http://nesl.ee.ucla.edu/projects/ahlos/hardware.htm</a> , Networks and Embedded Systems Lab, University of California, Los Angeles; bearing a date of 01/18/03, printed on 02/23/04.

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	BK	SAVVIDES, ANDREAS; "Localization Forum", pp.1 of 1, located at <a href="http://nesl.ee.ucla.edu/projects/ahlos/localization_forum.htm">http://nesl.ee.ucla.edu/projects/ahlos/localization_forum.htm</a> , Networks and Embedded Systems Lab, University of California, Los Angeles; bearing a date of 12/24/03, printed on 02/23/04.	
	BL	"The Ad-Hoc Localization System (AHLoS)" Networks and Embedded Systems Lab, University of California, Los Angeles; located at <a href="http://nesl.ee.ucla.edu/projects/ahlos/Default.htm">http://nesl.ee.ucla.edu/projects/ahlos/Default.htm</a> , pp. 1-4, printed on 02/23/04.	
	BM	"Tiny DB A Declarative Database for Sensor Networks" pp. 1-2, located at <a href="http://telegraph.cs.berkeley.edu/tinydb/">http://telegraph.cs.berkeley.edu/tinydb/</a> printed on 04/09/04.	
	BN	TINY SEC: LINK LAYER SECURITY FOR TINY DEVICES, "Calamari: A localization system for sensor networks", pp. 1-6, located at <a href="http://www.cs.berkeley.edu/~kamin/calamari/">http://www.cs.berkeley.edu/~kamin/calamari/</a> printed on 04/12/04.	
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